

Eight sites are within the proposed AALFTR area. Site 18673 (an extensive lava tube system containing cultural features and materials) had been previously located within the project area during the survey along the Redleg Trail (Reinman and Pantaleo 1998b). The recent SBCT survey in the AALFTR area (Roberts et al. 2003) identified an additional four lava tube cave sites. All five lava tubes contained evidence of their use as shelters or temporary habitation areas, but in the Site 18673 lava tube, three upright stones were found on basalt ledges, suggesting that these may have been shrines. The other sites consist of two complexes of excavated pits and one lithic scatter. All sites are Native Hawaiian sites that have not been formally evaluated for the NRHP. A total of 17 sites may be affected by construction of the proposed BAX; none of these have been evaluated for eligibility for the NRHP. Site types include excavated pit complexes, a complex of lava tubes with associated trails and cairns, rock shelters, modified outcrops, rock piles, a stand-alone cairn, a lava tube, a lithic scatter, and an enclosure. Potential impacts include site destruction or damage from construction of BAX/AALFTR facilities.

Facility and range construction involves grubbing vegetation, softening the ground, grading site surfaces, excavating, and moving heavy construction equipment. All of these activities, particularly ground softening, would directly damage or destroy unidentified archaeological resources or would indirectly damage them by contributing to soil erosion. Cultural resources within lava tubes would be particularly subject to damage as a result of ground softening prior to construction of the BAX. The mitigation measures below will reduce the severity of the impact but not to less than significant levels. Regulatory and Administrative Mitigation 2. Before construction, the Army will evaluate any archaeological sites within areas subject to range and facility construction. Sites determined to be eligible for the NRHP will be flagged for avoidance. The projects will be designed to avoid all eligible and unevaluated archaeological sites, to the full extent practicable. GIS and GPS information will be given to project designers and range control to ensure sites are considered in project design. If it is not possible to avoid archaeological sites, the Army will consult in accordance with the PA to determine the appropriate mitigation for the damage to the sites, such as data recovery or other mitigation measures. To address the accidental discovery of archaeological sites, human remains, or cultural items, the Army has developed an IDP as part of the PA.

Impact 3: Impacts on archaeological resources from training activities. In addition to the 25 sites within the BAX and AALFTR project areas, 96 archaeological sites (both prehistoric and pre-military historic) have been located within the WPAA. Site types on the parcel include ahu, mounds and mound complexes, an enclosed excavated pit, rock piles, enclosures, partial enclosures (C-shapes), an enclosed platform, wall sections, wall-mound-terrace complexes, a petroglyph, a pictograph, a sheep-cattle station complex, and a historic road.

Training activities on PTA and the WPAA under the Proposed Action would result in increased access by ground troops into the training areas, resulting in possible impacts on archaeological sites, off-road vehicular movement by current force and Strykers, cleanup of unexploded ordnance, and subsurface excavations related to troop maneuvers (e.g., field fortifications and obstacle placement). Live-fire activities on PTA ranges could damage surface or subsurface resources from direct impacts of munitions or explosives, although such activities are directed toward established live-fire ordnance impact areas. Activities such

as ordnance removal, construction of field fortifications or defensive positions, and off-road vehicular movement could cause site destruction or damage directly or indirectly through soil erosion. As discussed in Section 8.9, soil erosion is expected to increase at PTA under the Proposed Action. Unrestricted Stryker maneuvering is identified as a potential source of damage to archaeological sites. This type of damage would be more likely in the WPAA than at the AAJFTR or BAX, based on the Army's preliminary maneuverability maps for the installation and the dozens of archaeological sites located within the unrestricted maneuvering area. These sites would be at significant risk of damage from training exercises through direct and indirect effects of mounted maneuvers. The mitigation measures below will reduce the severity of the impact but not to less than significant levels.

Regulatory and Administrative Mitigation 3. The Army will evaluate archaeological sites within training areas related to SBCT. Sites determined to be eligible for the NRHP and sites pending evaluation will be identified and avoided through protective measures, to the full extent practicable. If avoidance of identified archaeological sites or newly discovered sites is not feasible, the Army will consult in accordance with the PA to determine the appropriate mitigation for the damage to the sites, such as data recovery or other mitigation measures. To address the accidental discovery of archaeological sites, human remains, or cultural items, the Army has developed an IDP as part of the PA.

Impact 4: Impacts on Areas of Traditional Importance. SRP (2002) is conducting a TCP survey at PTA to identify ATIs. As noted previously, evidence indicates the possible presence of ATIs, including burials in the ROI of PTA, although the survey did not identify any ATIs within the project areas.

There would be no noise impacts on ATIs at Mauna Kea because the noise analysis shown in Section 8.6 indicates that noise contours relating to ordnance use and construction under SBCT would not extend much beyond the PTA boundaries.

Conducting military training at the WPAA would limit access to the property. There are cultural resources of Native Hawaiian origin on the property, and it is possible that some of these resources constitute ATIs. Converting the use of the parcel to military training may also damage or destroy any unrecorded sites. Native Hawaiians consider range and training activities inappropriate and disrespectful uses of the land that disturb and change the character and feeling of spiritual places.

One FTI antenna will be placed on Mauna Loa, nine others will be located around PTA and the WPAA, and one more will be erected at Kawaihae. While the precise locations of the FTI sites will avoid archaeological resources, Mauna Loa has been identified as a particularly sacred element of the Native Hawaiian cultural landscape. While the antennas would be erected on top of existing support structures, the construction may be considered to have an adverse effect on the nature of the cultural landscape. ATIs and burials, if located within the area of construction activities or new training areas, would be at risk of damage or destruction as a result of the Proposed Action. Impacts could be caused by human presence in the area, physical disturbance from human or vehicle passage, or actual damage from

excavation or erosion. The mitigation measures described below will reduce the severity of these impacts on ATIs.

Regulatory and Administrative Mitigation 4. Facility construction or training area uses will be designed to avoid identified traditional places and limit visual impacts on TCPs by site location, design, and orientation, where feasible.

If avoiding identified TCPs or ATIs is not feasible because of interference with the military mission or risk to public safety, the Army will consult with the SHPO and Native Hawaiians in accordance with the PA to identify impacts and to develop appropriate mitigation measures. Mitigation for impacts on the cultural landscape could include consulting with Native Hawaiians and monitoring of construction by a cultural monitor.

The Army will continue to provide Native Hawaiians with access to traditional religious and cultural properties, in accordance with AIRFA and Executive Order 13007, on a case-by-case basis. This access program will be expanded to include new land acquisitions.

The Army previously identified Native Hawaiian burial sites in the SBCT ROI. The Army completed notification and consultation for these burial sites, in accordance with NAGPRA, and left these human remains in place. To address any impacts on any burial sites, or an inadvertent discovery of Native Hawaiian human remains or funerary objects, the Army will abide by all notification and consultation requirements outlined in Section 3 of NAGPRA.

Impact 5. Road construction impacts on archaeological sites. Acquisition and construction of PTA Trail would occur along a different alignment than the trail now used by military units traveling from Kawaihae Harbor to PTA. The seven cultural resources identified in the trail corridor, sites near the corridor, and in or near construction staging areas may be adversely affected during construction. Many archaeological sites have been identified near the northern end of the trail alignment. The large number of sites within the WPAA may also be affected, and until the location of the roads are selected, the potential impacts to sites that may be in close proximity to the roads can not be assessed.

PTA Trail as established, avoids all archaeological and historic sites in the Kawaihae area, but any alteration in the alignment could result in impacts on historic properties.

Constructing PTA Trail would involve grubbing vegetation, grading soil, and the regular use of heavy equipment. This activity could expose or disturb surface or subsurface cultural resources. Off-road movement of construction vehicles also could cause erosion, which could lead to damage of undiscovered sites in the vicinity of project operations. All of these activities could result in direct destruction or damage of archaeological resources or indirect damage by contributing to soil erosion. The mitigation measures below will substantially reduce the impact but not to less than significant levels.

Regulatory and Administrative Mitigation 5. In accordance with the PA, the Army will identify cultural properties, evaluate cultural properties for NRHP eligibility, and implement avoidance strategies to the full extent practicable. GIS and GPS information will be provided

to project designers to ensure sites are considered in the design and construction of all the proposed military vehicle trails and training roads in WPAA. If it is not possible to avoid archaeological sites, the Army will consult in accordance with the PA to determine the appropriate mitigation for the damage to the sites, such as data recovery or other mitigation measures. To address the accidental discovery of archaeological sites, human remains, or cultural items, the Army has developed an IDP as part of the PA.

#### Significant Impacts Mitigable to Less than Significant

Impact 6: Impacts on archaeological resources from road use. Impacts on sites along PTA Trail from military use of the trail could include erosion and possible vandalism or human access. These impacts are likely to be less than significant and will be mitigated by regular monitoring by installation cultural resources personnel. Road use within WPAA, however, poses a greater risk to resources recorded within the proposed new training area. The large number of gravel roads proposed would create additional impacts to sites within the WPAA including erosion and possible vandalism or human access. The mitigation measures below will reduce the severity of the impact to less than significant levels.

Regulatory and Administrative Mitigation 6. Eligible and unevaluated sites will be flagged and mapped on a range control GPS map. Installation cultural resources staff will monitor the sites regularly. Participants in training activities on the ranges will be ordered to avoid identified sites. To address the accidental discovery of archaeological sites, human remains, or cultural items, the Army has developed an IDP as part of the PA.

Impact 7: Impacts on archaeological sites from construction of the ammunition storage facility. The ammunition storage facility project involves the construction of three earth-covered ammunition storage buildings adjacent to existing ammunition storage buildings. There is one site complex (site 23455) of pahoehoe pits so there is a potential for a significant impact.

Regulatory and Administrative Mitigation 7. Before construction, the Army will complete the evaluation of any archaeological sites within areas subject to range and facility construction. Sites determined to be eligible for the NRHP will be flagged for avoidance. The projects will be designed to avoid all eligible and unevaluated archaeological sites, to the full extent practicable. GIS and GPS information will be given to project designers and range control to ensure sites are considered in project design. If it is not possible to avoid archaeological sites, the Army will consult in accordance with the PA to determine the appropriate mitigation for the damage to the sites, such as data recovery or other mitigation measures. To address the accidental discovery of archaeological sites, human remains, or cultural items, the Army has developed an IDP as part of the PA.

#### Less than Significant Impacts

Impacts from installation information infrastructure architecture construction. I3A would involve laying cables and conduits throughout the PTA cantonment area and out to the ranges, motor pool, and other facilities. These would be both underground and aboveground conduits. Excavation to lay cabling and conduits for the I3A project has the potential to disturb archaeological resources. Additionally, the I3A project could require bringing cables and conduits into historic buildings, which would necessitate drilling holes in the buildings and

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**Programmatic Agreement (PA)**  
**among the United States Army Garrison, Hawaii,**  
**the Hawai'i State Historic Preservation Office and the Advisory Council on Historic**  
**Preservation for Section 106 Responsibilities for the Army Transformation of**  
**the 2nd Brigade, 25th Infantry Division (Light) to a Stryker Brigade Combat Team**  
**(SBCT)**

WHEREAS, on April 11, 2002, the Department of the Army (Army) issued its Record of Decision to proceed with a multi-year, phased, and synchronized process to transform the Army; and

WHEREAS, Army Transformation initially involves converting six Army brigades to Stryker Brigade Combat Teams (SBCT); and

WHEREAS, one of the six brigades identified by the Army for conversion to an SBCT is the Second (2<sup>nd</sup>) Brigade of the 25<sup>th</sup> Infantry Division (Light) (25 ID (L)), subject to evaluation of the potential effects of project and site specific proposals for transformation actions pursuant to the National Historic Preservation Act of 1966, as amended; and

WHEREAS, the U.S. Army Garrison, Hawaii (Installation), by and through the Garrison Commander, proposes to implement the Department of the Army decision to transform the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L) to an SBCT; and

WHEREAS, twenty-eight (28) currently planned SBCT projects, listed in Appendix A, the introduction of the Stryker vehicle, and any future SBCT projects or activities, with potential adverse effects to historic properties within their areas of potential effects (APEs) are located at various Installations and sites on the islands of O'ahu and Hawai'i; and

WHEREAS, the Installation has determined that the implementation of these projects has the potential to adversely affect historic properties within their respective areas of potential effect (APEs) as indicated in Appendix A; and

WHEREAS, the Installation has determined that one of these projects is on Hickam Air Force Base National Historic Landmark and addressed in a separate EA; and one project is on the Wheeler Army Airfield National Historic Landmark and the Installation has determined that there are "no historic properties affected;" and

WHEREAS, the Installation has consulted with the Advisory Council on Historic Preservation (AChP) and the State Historic Preservation Officer (SHPO), pursuant to Section 800.14 of the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (16 USC 470f), and invites them to execute this programmatic agreement (PA); and

WHEREAS, the Installation has consulted with the Office of Hawaiian Affairs (OHA), National Park Service (NPS), Royal Order of Kamehameha I (ROOK), O'ahu Council of Hawaiian Civic Clubs (OCHCC), Hui Malama I Na Kupuna 'O Hawai'i Nei, O'ahu Island Burial Council (OIBC), Hawai'i Island Burial Council (HIBC), Historic Hawai'i Foundation (HHF), and Native Hawaiian organizations, families and individuals identified in Appendix D that attach traditional religious and cultural importance to cultural sites within the various project APEs and invites them to concur in this programmatic agreement (PA); and

WHEREAS, the consulting parties agree that because of the long time period and broad geographical extent of projects required to convert the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L) to an SBCT, it is appropriate to set forth processes in this PA for the identification, evaluation, treatment, and management of historic properties (the Act, Section 301(S), 16 USC 470w) including properties of traditional religious and cultural importance to Native Hawaiian organizations, families and individuals (the Act, Section 101(d)(1)(A), 16 USC 470a); and

WHEREAS, the Installation has provided the public an opportunity to comment on this undertaking through the Agency's National Environmental Policy Act process and has incorporated the recommendations of the public and reviewing agencies into this agreement; and

WHEREAS, the definitions provided in 36 CFR Part 800 are applicable throughout this Programmatic Agreement.

NOW THEREFORE, the Installation, the SHPO, ACHP, NPS, OHA, ROOK, OCHCC, Hui Malama I Na Kupuna 'O Hawaii Nei, HHF, HIBC, and OIBC agree that Section 106 compliance for potential historic properties within the areas of potential effects of SBCT projects on the islands of O'ahu and Hawai'i will be administered according to the following stipulations to satisfy Installation's Section 106 responsibilities for all individual undertakings associated with the conversion of the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L) to an SBCT.

## STIPULATIONS

The U. S. Army Garrison, Hawaii will insure that the following measures are carried out:

### I. Applicability.

- A. The terms of this agreement apply to a program to convert the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L) to an SBCT at various Installations and sites on O'ahu and Hawai'i, listed in Appendix A, and to take into account the effects of this program on historic properties within the areas of effect of projects associated with SBCT.

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B. Only those resources that are listed on or meet the eligibility criteria for listing in the National Register of Historic Places (National Register) are historic properties, and a subset of these are of traditional religious and cultural importance.

C. This PA is subordinate to any rights Native Hawaiians and Native Hawaiian organizations may have under federal law as set described in 36 CFR 800.2 (c) (ii) (B).

## **II. Planning and Coordination of Installation Activities to Implement SBCT.**

### **A. Personnel.**

(1) The Installation will employ, maintain a contract with, or obtain through other means, qualified professionals who meet the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9) in disciplines appropriate to carry out the Installation's NHPA responsibilities regarding identification and evaluation of historic properties and assessment and treatment of effects to such properties. Consultation with Native Hawaiians concerning the identification of sites of traditional religious and cultural importance is recognition of their expertise in these areas.

(2) The Installation will ensure that the Cultural Resources Manager (CRM) participates in Installation-level planning for proposed projects and activities related to SBCT that may affect historic properties.

### **B. Planning.**

(1) The Installation will ensure that documents pertaining to the proposed SBCT projects are analyzed by the CRM to identify specific undertakings that may be subject to review pursuant to the terms of this PA throughout conversion of the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L) to an SBCT. The documents to be analyzed will include, but are not limited to, military construction plans, troop training and range operation plans, Integrated Natural Resource Management Plans, ITAM program plans, tenant activities, and historic property renovation and demolition plans, insofar as these pertain to the conversion of the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L) to an SBCT.

(2) The Installation will ensure that schedules and priorities are established and documented for identification, evaluation, and treatment of historic properties within the 28 APEs. The Installation will ensure that all relevant Installation offices are informed of the schedules and priorities, the potential of these undertakings to affect historic properties, the requirement to ensure that an analysis of alternatives is fully considered as early as possible in project planning, and of the requirement to complete the review of the undertaking pursuant to this PA.

(3) The Installation will ensure that the undertakings identified herein and all related activities are planned, reviewed, and carried out according to the terms of this PA.

## **III. Consultation with Native Hawaiians**

- A. The Installation will identify Native Hawaiian organizations, families and individuals that may ascribe traditional religious and cultural importance to historic properties within the APEs of the SBCT projects.
- B. The Installation will consult with such Native Hawaiian organizations, families and individuals to solicit their assistance and advice in identifying properties of traditional religious and cultural importance within the proposed projects' APEs and in resolving concerns regarding confidentiality of information on historic properties.
- C. In recognition of the historic and cultural significance of the lands in the areas of potential effect for SBCT to Native Hawaiians and others, the Installation will generally look favorably on affording access for preservation and protection of historic sites to individuals and organizations, including any Native Hawaiian organization that attaches cultural significance to historic properties. Requests for such access need to be submitted in writing and will be considered in light of military operational requirements and anti-terrorist / force-protection security conditions and other pertinent circumstances as determined by the Installation at the time. Final approval or disapproval will be provided by the Installation in writing. Upon request, the Installation will consider events that celebrate and interpret historic activities tied to these lands.
- D. When an undertaking may affect properties of traditional religious and cultural importance to Native Hawaiians, the Installation will afford Native Hawaiian organizations, families and individuals the opportunity to participate as consulting parties in identification and evaluation of properties, and assessment and treatment of effects.
- E. The Installation, to show an understanding of the significance and respect properties of traditional religious and cultural importance, including burials and landscapes, play in the lives of Native Hawaiians, will work with a Cultural Monitor chosen from a list of available Cultural Monitors generated by Native Hawaiians from the area of concern, and provided to the Installation. These services will be obtained in accordance with applicable federal laws and guidance.
  - (1) The Installation will provide timely notification of all site-specific projects and access for the participation of a Cultural Monitor.
  - (2) A Cultural Monitor will demonstrate:
    - a) a cultural affiliation with the affected project area;
    - b) familiarity with the affected and anticipated cultural properties in the project area; and
    - c) sensitivity and the ability to represent and communicate with the Installation on behalf of Native Hawaiians.

(3) During construction activities that are likely to impact properties of traditional religious and cultural importance, the Cultural Monitor will be utilized to provide additional assurances to Native Hawaiians that properties of traditional religious and cultural importance are being properly treated. A Cultural Monitor will act as an independent observer who is both knowledgeable and sensitive to Native Hawaiian site management and who has the trust of members of his community. The Cultural Monitor will work closely with archaeologists to provide a liaison with Native Hawaiians when properties of traditional religious and cultural importance are discovered or inadvertently impacted, and assist in the identification and treatment of such sites.

(4) The Cultural Monitor will be available for the duration of the construction phase of the project and coordinating closely with the Installation CRM. When the construction phase of a project is complete, the Installation will consult with signatory and concurring parties and consider whether to extend the services of the Cultural Monitor(s). Cultural Monitors must consider the working environment and dress accordingly.

#### **IV. Identification, Evaluation, Assessment, and Treatment of Historic Properties.**

##### **A. General.**

(1) All identification and evaluation of properties or potentially eligible properties for undertakings occurring as a result of SBCT will be conducted according to the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.

(2) The Installation will complete identification and evaluation of historic properties prior to implementation of SBCT undertakings.

##### **B. Inventory.**

(1) Phase I inventory efforts will include, but are not limited to, the examination and synthesis of existing information such as photographs, maps, drawings, archival research, oral histories, condition assessments of buildings and data results of pedestrian surveys.

(2) Consult with Native Hawaiian organizations, families and individuals to assist with identifying properties of traditional religious and cultural importance.

(3) Phase I inventories to identify properties or potentially eligible properties within the APEs of all the SBCT Transformation project areas, as identified in Appendix A are complete. All draft and final reports will be submitted to signatory and concurring parties under cover letter by the Installation that explains the purpose of the report and the action requested of the signatory or concurring party.

##### **C. Evaluations of Significance for Properties - Phase II Inventory.**

(1) Initial Phase I surveys have identified properties or potentially eligible properties that need to be evaluated in the proposed project APEs.

(2) For Phase II survey inventories of properties or potentially eligible properties, the Installation may apply the Installation historic context and/or other evaluation methods listed below to the criteria of eligibility outlined in 36 CFR Part 63 to make a determination of eligibility for the National Register of Historic Places for these, and any other properties or potentially eligible properties identified through future inventory surveys related to SBCT proposed projects or activities.

- (a) Using the Installation historic context prepared for Integrated Cultural Resources Management Plan (ICRMP) (which includes the cultural landscape) as the basis for Installation identification, determinations of eligibility and treatment of all historic properties.
- (b) Testing to determine the depth, extent, and age of cultural deposits at archeological sites to clarify site boundaries and determine site integrity.
- (c) Assessing information provided by Native Hawaiian organizations, families, and individuals, and collecting further oral histories and archival information on identified traditional cultural properties and sacred sites, as required.
- (d) Preparing historic structure reports and condition assessments to determine/assess the significance of historic buildings and structures.
- (e) Employing such other methods as the parties may agree upon in this consultation.

(3) The results of these evaluations will form the basis for the Army to determine the eligibility of these properties for listing on the National Register of Historic Places.

#### D. Determinations of Eligibility

- (1) The Installation will notify the SHPO of its determination(s) of eligibility. This notification will include a description of the respective APE.
- (2) If SHPO disagrees with a determination of eligibility, they must notify the Installation within 30 days, documenting the reasons for the disagreement.
  - (a) The Installation reviews the documentation and revises the initial determination or consults with the SHPO to resolve the disagreement; or
  - (b) If the disagreement cannot be resolved through this consultation process, then the Army will forward to the Secretary of the Interior all disagreement documentation from SHPO along with all documentation resulting from the consultation process.
  - (c) The Secretary of the Interior reviews the documentation and makes a final determination.

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(3) If evaluation efforts result in the identification of properties that are eligible for the National Register, the Installation will update its existing inventory to include these properties and, at the request of the appropriate Native Hawaiian organizations, families and individuals, the existence and location of such properties will be available only for Installation planning purposes and will not be disclosed to the public.

(4) Results of evaluations of site significance and determinations of eligibility by the Installation will be documented in an annual report, see Stipulation VI. B, which will be made available to all signatory and concurring parties to this PA.

#### E. Procedures for assessing effect

(1) The Installation's CRM, using available professional expertise, assesses effects of all undertakings on historic properties and properties of traditional religious and cultural importance.

(2) If a no effect to historic properties determination is made, CRM will document a finding of "no historic properties affected" and provide notice to the SHPO and other concurring parties. If within 30 days, or 45 days if the determination of effects is combined with the determination of eligibility, no objection to the "no historic properties affected" determination is made, then the Installation may proceed to implement the proposed project or activity.

(3) If a "no adverse effect to historic properties" determination is made, the CRM will notify the SHPO and other concurring parties and provide for a 30-day review. If within 30 days, or 45 days if the determination of effects is combined with the determination of eligibility, no objection to the "no adverse effect to historic properties" determination is made, then the Installation may proceed to implement the proposed activity.

(4) If SHPO or other concurring parties disagree with a "no historic properties affected" or a "no adverse effect to historic properties" determination, they must notify the Installation within the 30-day or 45-day review period documenting the reasons for the disagreement.

(a) The Installation reviews the documentation and revises the initial determination; or

(b) The Army will forward to the ACHP all disagreement documentation from SHPO or other concurring parties.

(c) ACHP reviews the documentation within 30 days and makes recommendations to the Installation. The Installation will consider ACHP's views before proceeding. If the ACHP does not provide a recommendation to the Army within the review period, the Army may assume that the ACHP concurs with the Army's findings.

(5) If implementation of the proposed project or activity will result in an adverse effect to a historic property, the Installation will modify the project or activity to avoid the adverse effect wherever possible and practical as determined by the Installation.

(6) The Installation will consult with SHPO and concurring parties when adverse effects to historic properties cannot be avoided and implement mitigation measures in accordance with the results of the consultation and/or Stipulation IV (7) (a-i).

(7) If a "historic properties adversely affected" determination cannot be resolved through project modification, the Installation will implement either the following mitigation measures or others developed in consultation with other signatory and concurring parties, as applicable, prior to the initiation of the activity affecting the historic property.

(a) For archaeological sites, data recovery measures may be implemented as mitigation. A data recovery plan will be developed by the CRM, in consultation with the SHPO and other consulting parties, and implemented by the Installation.

(b) For historic buildings, documentation of the affected structure will be carried out by the CRM, in accordance with appropriate HABS/HAER standards developed through consultation with the SHPO and any other concurring party as appropriate.

(c) For properties of traditional religious and cultural importance, information related to the property will be collected through oral history interviews and archival research in Hawaiian and English texts. The Army will consult with the SHPO and other consulting parties to discuss the scope and disposition of the materials.

(d) Archeological site protection measures may be developed and implemented by the Installation. Short-term measures, such as monitoring, will be followed during construction of SBCT Transformation projects and facilities. Long-term measures will be followed during training exercises and other on-going uses. Examples of Long-Term measures might include establishing buffer zones around archaeological and cultural sites or identifying such areas as mine fields for training purposes.

(e) Prior to any training exercise, existing site protection measures developed by the CRM will be reviewed by training personnel, summarized and disseminated to training units.

(f) Any mitigation measures developed in consultation will be documented in a formal mitigation plan, reviewed by all parties to this PA, signed and approved by the Garrison Commander, and implemented through the Installation Cultural Resources Management Program.

(g) Historic properties, including properties of traditional religious and cultural importance, in SBCT Transformation training areas will be monitored by the Installation CRM or by personnel delegated by the CRM. Monitoring will be done in accordance with Appendix B.

(h) The Installation will provide all of its relevant offices at the Installation, including fire-fighting, range, and training personnel, with copies of the site protection measures that are developed.

(i) The Installation will provide all consultation comments and mitigation treatment results in an annual report, see Stipulation VI. B.

F. Treatment of Human Remains - If human remains are inadvertently discovered during implementation of an undertaking or program activity, the Installation will ensure that all activity in the area immediately surrounding the discovery ceases and the appropriate Installation CRM is notified of the find. The Installation will ensure that the remains are secured from further disturbance or vandalism and covered for protection from the elements until the Installation in accordance with NAGPRA procedures and Appendix C, Inadvertent Discovery Plan, has determined the appropriate treatment in consultation with the O'ahu and Hawai'i Island Burial Councils and identified lineal descendants.

## **V. Additional Installation Management and Coordination Activities.**

### **A. Project Monitoring.**

(1) The Installation will insure that all excavations conducted as part of construction projects associated with the conversion of the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L), especially those in areas of high archaeological sensitivity, are monitored by an archaeologist and a Cultural Monitor in accordance with Stipulation III.D.

(2) The Installation will insure that the CRM is staffed adequately to undertake these monitoring activities and produce written monitoring reports on an annual basis. The Installation will provide copies of these monitoring reports to all signatory and concurring parties to this PA. These reports will also be contained in the annual report on PA activities outlined in Stipulation VI (B).

### **B. Exempt Activities.**

The parties to this PA have consulted and agree that certain routine activities may be exempt from consultation under this PA provided that the installation CRM finds that their effects on cultural resources in or eligible for the National Register will not be adverse based on criteria in 36 CFR Part 800.5. These activities include:

(1) Maintenance activities in areas that have been previously landscaped may be maintained by tree trimming, grass mowing and cutting, and similar basic landscape maintenance activities.

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(2) Previously paved areas such as roads, parking areas, and paths may be maintained and repaved and/or resurfaced provided that heavy equipment is restricted to use in previously disturbed areas.

(3) Existing military facilities that have been determined not to be historic properties may be maintained and repaired. These facilities include but are not limited to buildings, water, sewer, telephone and communications lines and infrastructure, gas and electric utilities infrastructure.

(4) Continued use of impact areas, firing ranges, and other designated surface danger zones.

## **VI. Administrative Stipulations**

### **A. Anti-Deficiency Act Compliance.**

The stipulations of this PA are subject to the provisions of the Anti-Deficiency Act. If compliance with the Anti-Deficiency Act alters or impairs Installation's ability to implement the stipulations of this PA, the Installation will consult according to the amendment and termination procedures found at Stipulations VI. F and E of this PA.

### **B. Reporting and Annual Review.**

(1) The Installation will provide all signatory and concurring parties with an annual report on or before July 1 of each year summarizing activities carried out under the terms of this PA.

(a) Annual reports will include a list of projects and program activities that summarize proposed project determinations of effect to historic properties, a summary of mitigation or treatment measures implemented to address the effects of undertakings, and a summary of consultation activities and the views of the SHPO and interested parties where appropriate. Determinations of Eligibility to the National Register of Historic Places will also be summarized. The annual monitoring report will be a part of this report.

(b) Cultural Resources Inventory Reports, Archaeological Monitoring Plans, Preservation or Mitigation Treatment Plans, Data Recovery Plans, and oral histories or ethnographic studies will be submitted, as they are developed and finalized, to the signatories and concurring parties to this PA.

(c) All annual reports will be produced through 2010 or completion of the transformation to a SBCT of the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L).

(d) The signatories to this PA will review the annual report's information to determine what, if any, revisions or amendments to the PA are necessary. After the parties have had an opportunity to review the annual report, the Installation will sponsor a meeting to discuss the report and/or any related matters if requested to do so by any signatory or concurring party to this PA.

### **C. Dispute Resolution**

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(1) Should any signatory or concurring party to this PA object to any action carried out or proposed by the Installation with respect to implementation of this PA, the objecting party will send the objection, in writing, to the Garrison Commander at Schofield Barracks. The Installation will consult with the objecting party to resolve the objection. If the objecting party and the Installation cannot resolve the dispute, the Installation will consult with the SHPO and the other concurring parties to resolve the objection. If the objection cannot be resolved through this consultation process, or if the objection is from the SHPO, the Installation will forward all documentation relevant to the dispute to the ACHP. Within thirty calendar days after receipt of all pertinent documentation, the ACHP will exercise one of the following options:

(a) Advise the Installation that the ACHP concurs in the Installation's proposed final decision, whereupon the Installation will respond to the objection accordingly.

(b) Provide the Installation with recommendations, which the Installation will take into account in reaching a final decision regarding its response to the objection; or,

(c) Notify the Installation that the ACHP will comment pursuant to 36 CFR Part 800, and proceed to comment. The resulting comment will be taken into account by the Installation according to 36 CFR Part 800 and Section 110(l) of NHPA.

(2) Should the ACHP not exercise one of the above options within 30 days after receipt of all pertinent documentation, the Installation may assume the Council's concurrence with its proposed response to the objection.

(3) The Installation will take into account any ACHP recommendation or comment provided according to this stipulation with reference only to the subject of the objection; the Installation responsibility to carry out all actions under this PA that are not the subject of the objection will remain unchanged.

(4) Should an objection pertaining to this PA be raised at any time by a member of the public, including Native Hawaiian organizations, families and individuals, the objection will be submitted in writing to the Garrison Commander at Schofield Barracks. The Installation will notify the signatory and concurring parties to this PA and take the objection into account before proceeding with the undertaking at issue.

#### D. Monitoring of Programmatic Agreement

The SHPO and the ACHP Council may monitor any activities carried out pursuant to this Agreement, and the ACHP will review any activities if so requested. The Installation will cooperate with the SHPO and the ACHP should they request to monitor or to review project files for activities carried out pursuant to this Agreement.

#### E. Termination of the Programmatic Agreement.

(1) If the Installation determines that it cannot implement the terms of this PA, or if the SHPO or ACHP determines that the PA is not being properly implemented, the Installation, the SHPO, or ACHP may propose to the other parties to this PA that it be terminated.

(2) The party proposing to terminate this PA will so notify all parties to this PA, explaining the reasons for termination and affording them at least 30 days to consult and seek alternatives to termination.

(3) Should such consultation fail and the PA is terminated, the Installation will:

(a) Consult according to 36 CFR Section 800.14 to develop a new PA; or,

(b) Comply with 36 CFR Part 800 with regard to each undertaking.

#### F. Amendment of the Programmatic Agreement.

Any signatory or concurring party to this PA may propose to the Installation that the PA be amended, whereupon the Installation will consult with the other parties to this PA to consider such amendment. 36 CFR Section 800.14 will govern the execution of any amendment.

#### G. Expiration and Renewal of the Programmatic Agreement

This PA will take effect on the date it is signed by the last signatory and will remain in effect throughout the transformation of the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L) to an SBCT in 2010. No extension or modification will be effective unless all signatories have agreed in writing.

#### H. This PA may be executed in counterpart signatures.

Execution and implementation of this PA evidences that the Installation has afforded the Council a reasonable opportunity to comment on the transformation of the 2<sup>nd</sup> Brigade 25<sup>th</sup> ID (L) to an SBCT at and by the US Army, Garrison, Hawai'i, and that the Installation has taken into account the effects of the undertaking on historic properties. Execution and compliance with this programmatic agreement fulfills the Installation's Section 106 responsibilities regarding the transformation of the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> ID (L) to an SBCT.

---

1/30/04

**SIGNATORY PARTIES:**

**UNITED STATES ARMY**

By:

*David L. Anderson*  
David L. Anderson

Date:

30 JAN 2004

Garrison Commander

**STATE HISTORIC PRESERVATION OFFICER**

By:

Peter T. Young

Date:

State Historic Preservation Officer

**ADVISORY COUNCIL ON HISTORIC PRESERVATION**

By:

John M. Fowler

Date:

Executive Director

02/26/2004 09:38 3039695115

PAGE 01

1/30/04

**SIGNATORY PARTIES:**

**UNITED STATES ARMY**

By:

  
David L. Anderson

Date:

30 JAN 2004

Garrison Commander

**STATE HISTORIC PRESERVATION OFFICER**

By:

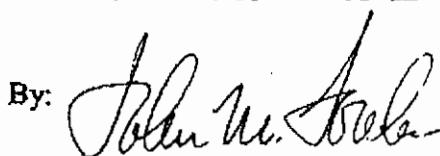
Peter T. Young

Date:

State Historic Preservation Officer

**ADVISORY COUNCIL ON HISTORIC PRESERVATION**

By:

  
John M. Fowler

Date:

2/19/04

Executive Director

1/30/04

**SIGNATORY PARTIES:**

**UNITED STATES ARMY**

By:

  
David L. Anderson

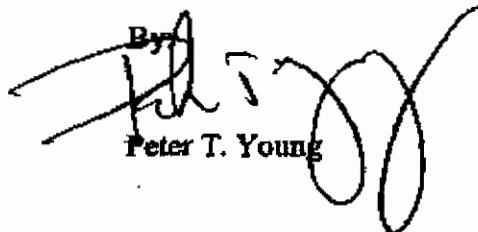
Date:

19 JAN 2004

Garrison Commander

**STATE HISTORIC PRESERVATION OFFICER**

By:

  
Peter T. Young

Date:

FEB - 9 2004

State Historic Preservation Officer

**ADVISORY COUNCIL ON HISTORIC PRESERVATION**

By:

John M. Fowler

Date:

Executive Director

**CONCURRING PARTIES:**

**OFFICE OF HAWAIIAN AFFAIRS**

By: *Haunani Apoliona* Date: *3/4/04*  
*with Reservations*  
Haunani Apoliona Chair, Board of Trustees

**HUI MALAMA I NA KUPUNA 'O HAWAII NEI**

By: \_\_\_\_\_ Date: \_\_\_\_\_

Po'o Kunani Nihipali

**ROYAL ORDER OF KAMEHAMEHA I**

By: \_\_\_\_\_ Date: \_\_\_\_\_

Alii Nui & Grandmaster Alii Sir Gabriel Makuakane, K.G.C. K.

**O'AHU COUNCIL OF HAWAIIAN CIVIC CLUBS**

By: \_\_\_\_\_ Date: \_\_\_\_\_

President, Ms. Jalna Keala

**O'AHU ISLAND BURIAL COUNCIL**

By: \_\_\_\_\_ Date: \_\_\_\_\_

Chairman, Van Horn Diamond

**HAWAII ISLAND BURIAL COUNCIL**

By: Date:

Chairperson, Geri Bell

**HISTORIC HAWAII FOUNDATION**

By: Date:

Director, David Scott

**NATIONAL PARK SERVICE**

By: Date:

Pacific West Regional Director, Jonathan B. Jarvis

**WAIMEA HAWAIIAN CIVIC CLUB**

By: Date:

President, Mabel Tolentino

## APPENDICES

- A. SBCT project list.
- B. Monitoring Plan.
- C. Inadvertent Discovery Plan.
- D. Consulting Parties.

**APPENDIX A**  
**SUMMARY OF SBCT TRANSFORMATION PROJECTS**  
**IN O'AHU AND HAWAII ISLANDS**

This appendix summarizes the proposed SBCT Transformation projects with possible impacts in the islands of O'ahu and Hawai'i. The information is presented in tabular form and sorted by Fiscal Year.

Summary of SBCT Transformation Projects in O'ahu and Hawai'i Islands

<b>Fiscal Year</b>	<b>Project Number</b>	<b>Project Name</b>	<b>Sub-Installation of Project Location</b>
2005	57183	Anti-armor Live Fire and Tracking Range	Pohakuloa
2007	57197	Battle Area Complex (BAX)	Pohakuloa
2005	57305	Combined Arms Collective Training Facility	Kahuku
2007	57404	Virtual Fighting Training Facility	Schofield
2005	57406	Road Construction, Schofield to Helemano	Schofield to Helemano
2006	57412	Construct Tank Trail, Pohakuloa to Kawaihae	Pohakuloa
2004	57461	Multipurpose Qualification Complex, QTR1	Schofield
2004	57802	Land Easement, Schofield to Helemano	Schofield to Helemano
2005	58143	Urban Assault Course and Training Facilities	Schofield
2006	58273	Land Easement and Tank Trail, Pohakuloa to Kawaihae	Pohakuloa
2004	55270	South Range Land Acquisition	Schofield
2006	56994	Range Maintenance Facility	Pohakuloa
2006	57408	Runway Upgrade and Extension, Bradshaw Army Air Field	Pohakuloa
2005	57416	Tactical Vehicle Wash Facility	Schofield
2005	57421	Motor Pool Maintenance Shops	Schofield
2005	57462	Multipurpose Qualification Range, QTR 2	Schofield
2005	58144	Battle Area Complex (BAX)	Schofield
2006	58161	Land Easement and Construction of Road	Schofield to Dillingham
2005	58165	Installation Information Infrastructure	Pohakuloa
2005	?????	Fixed Tactical Internet	Pohakuloa

Fiscal Year	Project Number	Project Name	Sub-Installation of Project Location
2005	?????	Fixed Tactical Internet	Schofield, Dillingham
2007	56923	Range Control Facility	Schofield
2006	57405	Upgrade Airfield for C-130 Aircraft	Wheeler
2005	57411	West PTA Maneuver Training Area Land Acquisition	Pohakuloa
2006	57414	Tactical Vehicle Wash Facility	Pohakuloa
2006	57417	Ammunition Storage	Pohakuloa
2005	57422	Multiple Deployment Facility	Wheeler
2007	57415	Tactical Vehicle Wash Facility	Kahuku

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**APPENDIX B  
ARCHAEOLOGICAL SITE MONITORING  
AND  
ARCHAEOLOGICAL SITE PROTECTION OPTIONS**

**Archaeological Site Monitoring**

**Monitoring Sites for Major Training**

Archaeological sites located in areas of troop concentrations (e.g., favored bivouac sites, fixed firing points, maneuver areas) will be monitored (inspected) on a regular basis to identify impacts from training. If necessary, the Installation will implement site protection measures for threatened sites if prudent (e.g., flagging, fencing), and to monitor the effectiveness of such measures. For the first year after the signing of this Programmatic Agreement, this will be done whenever a unit departs a Training Area, or range, and immediately following the training exercise. The monitor may accompany Range Control personnel in their regular performance of the clearance inspection before the unit departs the field (U.S. Army 1993: Chapter 2, Section 2-4b). After the first year, the monitoring will occur quarterly or after every major exercise involving battalion or larger units.

**Monitoring Sites for Other Reasons**

Monitoring of archaeological site conditions will be scheduled for other actions that will permit large numbers of personnel into areas of concentrated archaeological sites for a protracted period of time (e.g., construction of a new firebreak road or upgrading facilities), or in response to any report of non-permitted site access or vandalism. All archaeological sites within the actively used training areas will be monitored quarterly after the first year of this Programmatic Agreement.

**Monitoring Records**

All site monitoring will be documented, including date, name and title or rank of inspector, reason for inspection (e.g., name of military training unit and/or maneuver), sites visited, observed site conditions, and recommended site protection actions as appropriate. Sketch maps and/or photographs showing changes in site conditions will be included in the monitoring documentation record. For particular sites it may be advantageous to establish photographic vantage points, with photographs taken during each monitoring episode. Site monitoring efforts will be reported by the Installation Cultural Resources Manager (CRM) in the annual report.

**Reporting Site Damage**

The CRM will report to the Range Officer within 48 hours of his or her notice that humans or natural agents have damaged an archaeological site. The CRM's report will include (1) the circumstances of the site damage such as how and when the damage occurred and who was responsible, (2) assessment of the nature and extent of site damage including first-hand observations made by the CRM and/or his or her representative, with

1/30/04

reference to site conditions documented prior to the damage, (3) recommendations for treatment of the damaged site such as data recovery excavation or site fencing, and (4) suggestions to avoid damage to other sites potentially threatened by similar circumstances. Acting as the Installation Commander's representative, the CRM will notify the Hawai'i SHPO and OHA telephonically, via e-mail, or with written correspondence within five working days of the discovery and consult about treatment of the damaged resource. All incidents involving damage to archaeological sites will be summarized in the annual report.

#### **Archaeological Site Protection Options.**

The three management options for protecting sites are:

1. Manage sites in place as Training Restriction Areas
2. Establish physical barriers
3. Recover and document site data through the guided, intensive study of the research design.

Archaeological sites can be integrated into a military training scenario, for example, by assuming the role of training hazards (e.g., mine fields), thus protecting the sites while enhancing the training activity.

Individual archaeological sites or site concentrations threatened by military operations may be placed within designated *Exclusion Areas*, with corresponding land use regulations made part of the regular SOP for Installation users. The site concentration might be designated an exclusion area on updated versions of the Installation map, with users informed of the land use regulations via the *External SOP* or simple informative handouts. Site conditions within the exclusion area would be inspected periodically to ensure that this level of protection is adequate to preserve the resources.

Those archaeological resources subjected to ongoing or repeated, degrading impacts from human agents or other causes including feral game may best be managed by site fencing. Fenced sites will require periodic monitoring to ensure that the barriers remain in place and the markings do not unduly attract site vandals.

For less complex sites characterized by few data potentials and of no special importance to contemporary Native Hawaiians, data recovery study programs will be the most cost-effective management approach, especially for sites located in areas of more intensive military land-use.

**APPENDIX C**  
**INADVERTENT DISCOVERY PLAN**

1. Any employee (or contractor in the employ) of the Installation who knows or has reason to know that human remains or cultural items have been inadvertently discovered on land owned or controlled by the Installation, shall provide immediate telephone notification of the discovery, with written back-up to the Garrison Commander and the Installation Cultural Resources Manager.
2. The employee or contractor shall also stop any activity in the area of the discovery and make a reasonable effort to protect the human remains and cultural items.
3. Once contacted regarding an inadvertent discovery, the Installation will make an in situ examination of the condition, antiquity and cultural affiliation of the human remains and cultural items based upon applicable professional standards to determine whether the remains and cultural items are Native Hawaiian.
4. If the examination determines that the human remains or cultural items are Native Hawaiian, the Installation shall notify the State Historic Preservation Division, OHA and the appropriate Burial Council telephonically, via e-mail, or with written correspondence within 48 hours.
5. If the human remains and cultural items cannot be left in situ, their excavation and removal shall be undertaken by professional archaeologists employed by the Installation within 15 working days from the initial contact between the Installation and the Burial Council.
6. Prior to disposition of the human remains and cultural items, the Installation shall publish a general notice of the proposed disposition in a newspaper of general circulation in the area in which the remains were recovered. The notice shall provide information as to the nature and cultural affiliation of the remains and cultural items and shall solicit further claims of ownership. The notice shall be published at least twice, at one-week intervals, and transfer shall not take place until 30 days after the second notice to allow for any additional claimants to come forward.
7. If re-internment is on land owned or controlled by the Installation, the location of the re-internment shall only be reported to the claimant, the Garrison Commander, and the Cultural Resources Manager for the Installation.

**APPENDIX D**  
**CONSULTING PARTIES AND HAWAIIAN ORGANIZATIONS, GROUPS, AND INDIVIDUALS**

Consulting Parties, Hawaiian organizations, families, and individuals include, but are not limited to:

Office of Hawaiian Affairs Trustees

Associations of Hawaiian Civic Clubs

Life of the Land

Kamehameha Schools Trustees

Royal Order of Kamehameha, Hilo

Mr. Tom Lenchanko, Kahu of Kukaniloko

Kalani Flores, Kahuokahiku

Royal Order Of Kamehameha I (Statewide Organization)

Royal Order Of Kamehameha I, Hawai'i Chapter

Friends Of Honouliuli

Hawaiian Civic Club Of Wahiawa

Northshore Community Land Trust

The Friends Of Kukaniloko

'Ike'Aina – Native Hawaiian Land Trust

Wahiawa Community Business Association

Pohakuloa Training Area Cultural Advisory Committee (PTACAC)

Paniolo Preservation Society

**TITLE:** Archaeological Reconnaissance Survey, U.S.  
Army Pohakuloa Training Area (PTA) for the  
U.S. Army Garrison, Hawaii, Ecosystem  
Management Program, Hawai‘i Island, Hawai‘i

**AUTHOR:** Williams, Scott S.

**DATE:** April 2002

## **FINAL REPORT**

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**Archaeological Reconnaissance Survey U.S. Army  
Pohakuloa Training Area (PTA) for the U.S. Army  
Garrison, Hawaii, Ecosystem Management Program  
Hawai'i Island, Hawai'i**

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**Prepared for:**  
U.S. Army Engineer District, Honolulu  
Corps of Engineers Building 252  
Fort Shafter, Hawai'i 96858-5440

Contract No. DACA83-95-D-0006  
Delivery Orders 0015

**Submitted by:**  
Ogden Environmental and Energy Services Co., Inc.  
680 Iwilei Road Suite 660  
Honolulu, Hawai'i 96817

April 2002

**OGDEN**



0060998

The main building A, is ninety-two feet long, by seventy-one feet ten inches wide; the walls are six feet nine inches high, seven feet thick at the top, and nearly perpendicular; the partition walls are three feet high; B and C are said to have been pedestals for idols; D, E, and F, are the pyramids built by Umi, eighteen feet high; G is the residence of Kaili's wife, Papa, also built by Umi.

The five remaining pyramids, H, I, J, K, L, are those erected by the conquered districts. All these are built of compact blocks of lava, laid without cement.

The building is said to have formerly been covered with idols, and offerings were required to be brought from a great distance, consisting generally of provisions. There are now no traces left of these idols.

According to tradition the *heiau* was built around A.D. 1600 to commemorate the unification of the island of Hawai'i by chief 'Umi a Liloa (Kirch 1985:179).

Although Ahu a 'Umi is the only traditionally known *heiau* within the vicinity of PTA, other smaller ritual sites have been recorded archaeologically. The MKAQC and the summit region of Mauna Kea contain numerous shrines, some that are connected to the quarrying activities and adze production (McCoy 1976, 1990), and others that appear to be associated with the mountain summit (and probably its resident gods). There are also small shrine sites recorded within PTA, generally consisting of upright stones within or near lava tubes or platform sites.

Maly (1997: 21-23) cites historical records which indicate that 'Umi built two other *heiau* on the slopes of Mauna Kea, at higher elevations than Ahu a 'Umi, and even resided for a time near one of them.

#### Burial of the Dead

The care, treatment, and disposal of the dead were important traditional activities for the Hawaiians. The manner in which the dead were disposed of varied greatly, and included interment in lava tubes or hidden in unmarked lava crevices, entombed in stone platforms, and buried in sand dunes (cf. Bowen 1961 and J. Cleghorn 1987). While no confirmed human burial areas have been found in PTA, isolated bone fragments have, and the stone platforms recorded by Shapiro et al. (1998) in the southeast portion of PTA may be burial platforms, although some of these may also be religious shrines. Burials are known from cinder cones within Ka'ohé Ahupua'a (Cordy 1994), at lower elevations outside of PTA and at higher elevations on Mauna Kea (Maly 1997).

#### CHRONOLOGY OF USE

The earliest archaeological sites in PTA may date to the 8<sup>th</sup> century A.D. (Streck 1992). Early use of the upland plateau was probably non-intensive and associated with exploration of the area and limited initial resource exploitation. Most of the archaeological sites in the region date to the period between A.D. 1400 and 1550 (Streck 1992). This intensive use of the area correlates with the time of extensive activity at the MKAQC, dynamic changes in the Hawaiian sociopolitical

## SECTION VI: CONCLUSION

Scott S. Williams

This report presented the results of three separate studies on the cultural resources of PTA. Each of these studies illustrated different approaches to investigating and managing the cultural resources of the area. Although each study employed different methods, the goal of each was the same: to assist the U.S. Army in properly managing the important and unique cultural resources under its control within the Pohakuloa Training Area. Such management is mandated by Federal law and Department of Defense regulations.

The Pohakuloa Training Area represents an area rich with abundant and unique cultural resources. Although the area and the resources in it are often viewed as representing "marginal" or "peripheral" areas of traditional Hawaiian exploitation and settlement, they are all the more important for doing so: they provide important data on aspects of traditional Hawaiian history that are not available anywhere else in Hawai'i. The proper management of these resources is critical for future studies into ancient Hawaiian history and culture and to the sense of cultural identity for modern Hawaiians. Management of such cultural resources is challenging: they must be protected from intentional or unintentional harm or destruction, and most importantly, they must be made available to modern peoples either through permitted access or through the avenue of archaeological and historical study. Such studies, properly managed and planned, allow the resources to once again become part of our collective cultural heritage, without having to expose the resources to the dangers of too many visitors or artifact collectors who would destroy the sites for personal gain. From a military management perspective, such studies also fulfill Department of Defense directives towards properly caring for and managing such resources, with minimal impact to the primary mission of the installation.

The archaeological survey reported in Section III greatly expanded knowledge of the range and density of archaeological remains at PTA. Two new site types that had not been recognized during previous surveys, and indeed which are unique to the PTA area, were identified: pits excavated into older pahoehoe lava flows and complexes of cairns that appear to have served ritual functions. The function of the excavated pits is likely to be to enhance bird nesting areas, and it is clear based on the survey results that they are an abundant site type, at least in the eastern portion of PTA. Future research into these features will be critical for determining their function and chronological placement, and already such studies have begun under the direction of the Environmental Staff of PTA (Moniz-Nakamura et al. 1998). More such studies are needed, however, if we are to understand the true function or functions of the excavated pits and the extent of their construction over the landscape. Additional archaeological surveys on the east side of PTA, including Williams (2002) and one currently on-going as this is written (by Garcia and Associates, Inc.), further indicate that large numbers of archaeological sites are present on a variety of flow types in the eastern portion of PTA, and we still have only a basic knowledge of the patterning of site types across the region.

The paleo-environmental study reported in Section IV has expanded the existing database concerning radiocarbon chronologies and environmental changes within the PTA region. Such studies form a baseline to which future studies can build on, and, most importantly, provide context in which to place the development of the cultural resources of the area. Such studies are

**TITLE:** Archaeological Surveys of Proposed Training Areas for the Stryker Brigade Combat Team, U.S. Army Pohakuloa Training Area, Island of Hawaii, Hawaii

**AUTHOR:** Roberts, Alice; Robins, Jennifer; Buffum, Amy – Garcia and Associates

**DATE:** May 2004

**ARCHAEOLOGICAL SURVEYS OF PROPOSED TRAINING AREAS  
FOR THE  
STRYKER BRIGADE COMBAT TEAM  
U.S. ARMY POHAKULOA TRAINING AREA,  
ISLAND OF HAWAII, HAWAII  
CONTRACT No. DACA83-01-D-0013, Task Order No. 0007**

**FINAL REPORT**

**Prepared for:**

U.S. Army Engineer District, Honolulu  
CEPOH-EC-E  
Fort Shafter HI 96858-5440

**Prepared By:**

Garcia and Associates (GANDA)  
146 Hekili St., Suite 101  
Kailua, HI 96734

May 2004



## MANAGEMENT SUMMARY

The U.S. Army Corps of Engineers, Honolulu District (ACOE) requested archaeological reconnaissance surveys of 27,500 total acres for the Stryker Brigade Combat Team (SBCT) Projects at U.S. Army Pohakuloa Training Area (PTA) and associated lands, Island of Hawai'i, as specified in the modified scope-of-work (SOW) dated 22 June 2002. Four separate study areas are included in the task order: (1) the PTA Battle Area Complex (BAX) and (2) Anti-Armor Live Fire and Training Range (AALFTR) totaling approximately 8,170 acres; (3) the 22,675-acre West PTA Acquisition Area (WPAA); and (4) the PTA Trail.

Archaeological reconnaissance survey located cultural resources within the study areas, provided basic documentation of identified resources, and facilitated preliminary evaluations of significance and recommendations for future archaeological work.

Archaeological survey for SBCT identified:

- PTA-BAX – eight (8) pre-Contact Hawaiian sites.
- PTA-AALFTR - nine (9) pre-Contact Hawaiian sites, and two (2) historic sites.
- WPAA – six (6) traditional Hawaiian sites; sixty (60) post-Contact sites, and six (6) sites with an undetermined age.
- PTA Trail – seven (7) historic sites.

All sites in the BAX study area are considered potentially eligible for listing in the National Register of Historic Places (NRHP) under Criterion D, as per 36CFR60.4. With the exception of Site 23455, a site for which adequate data has been collected, all sites in the BAX study area are recommended for Phase II inventory-level research and evaluation.

All sites in the AALFTR study area are considered eligible for listing in the National Register of Historic Places (NRHP) under Criterion D, as per 36CFR60.4, and are recommended for Phase II inventory-level research and evaluation.

All sites in the WPAA are considered potentially eligible for listing in the NRHP under Criteria A, C and D, as appropriate, as per 36CFR60.4. With the exception of the cairn/marker sites, for which adequate data have been collected, all sites in the WPAA study area are recommended for Phase II inventory-level research and evaluation.

All of the sites in the PTA Trail easement are considered potentially eligible for listing in the NRHP under Criteria A and D, as appropriate, as per 36CFR60.4, and are recommended for Phase II inventory-level research and evaluation.

<b>SHPO Site No.:</b>	23591	<b>GANDA Site No.:</b>	821
<b>Site Type:</b>	Lava tube		
<b>Function:</b>	Temporary habitation/Burial		
<b>Affiliation:</b>	Hawaiian		
<b>No. of Features:</b>	1		
<b>Site Size:</b>	>60 m x 15m		
<b>Cultural Material:</b>	Gourd, modified wood		
<b>Recommendation:</b>	Phase II (map)/preservation		
<b>Description:</b> Site 23591 is a lava tube accessed through a vertical opening in the east face of a 15m <sup>2</sup> sink (Figure 109). The site is in the middle of rolling pastureland. It functioned as a temporary habitation and burial place.			

The first chamber accessed through the 1.3-m-high entrance in the sink is in a partial light zone. The cavern has a high ceiling (2 m-plus) with an uneven, broken outcrop floor and intermittent silt-filled pockets. Human skeleton remains, representing at least two individual, were observed in a pile near the south wall of the cavern. Military razor wire spans the width of cavern just east of the remains. A gourd fragment was identified in a small, lower cavern near the north wall of the main chamber.

Roughly 30 m east of the entrance, the tube floor descends steeply over jumbled large boulders to a lower cavern with a deep silt floor. A small cavern extends southwest of the second chamber (behind or south of the rocky slope); human remains are on an upper shelf of the west wall of the small cavern. A complete gourd was also noted on the floor opposite the remains.

This second, unlit chamber continues east into a narrowed passage (roughly 10 m) squared that is partly walled on the east end. A piece of cut wood is on the wall.

Beyond the wall are two additional caverns separated by narrowed passages. In the fourth chamber, modified wood is on the floor and human skeletal remains are piled on an upper shelf of the cavern. No further exploration of the lava tube was conducted beyond the fourth chamber.

<b>SHPO Site No.:</b>	23592	<b>GANDA Site No.:</b>	822
-----------------------	-------	------------------------	-----

<b>Site Type:</b>	Mound
<b>Function:</b>	Marker
<b>Possible age:</b>	Historic
<b>No. of Features:</b>	1
<b>Site Size:</b>	2 m x 1.5 m x 1m
<b>Cultural Material:</b>	None observed
<b>Recommendation:</b>	No further work

**Description:** This site consists of a single mound (Figure 110) situated atop the western ridge of Pu'u Pāpapa. The mound measures c. 2.0 m x 1.5 m x 1.0m, and may have initially been constructed for use as a marker. Cattle and other ranching activities have disturbed the area, and bulldozer push piles were observed c. 60 m to the west of the feature.